IETF DNSOP WG Update
– and some DPRIVE

Suzanne Woolf

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IETF DNSOP Update on … (1)

- Submitted to IESG for publication
  - draft-ietf-dnsop-attrleaf /draft-ietf-dnsop-attrleaf-fix
  - draft-ietf-dnsop-dns-capture-format
  - draft-ietf-dnsop-isp-ip6rdns
  - draft-ietf-dnsop-kskroll-sentinel
  - draft-ietf-dnsop-refuse-any
  - draft-ietf-dnsop-session-signal
  - draft-ietf-dnsop-terminology-bis

… and happy OPS AD

IETF DNSOP Update on … (2)

draft-ietf-dnsop-attrleaf-14 **DNS Scoped Data Through "Underscore" Naming of Attribute Leaves**	2018-10-10 13 pages New	Approved-announcement to be sent::Revised I-D Needed for 7 days Submitted to IESG for Publication: Best Current Practice Reviews: genart, opsdir, secdir	Warren Kumari Benno Overeinder
draft-ietf-dnsop-attrleaf-fix-05 **Fixing Specifications with**	2018-10-10 14 pages	IESG Evaluation::Revised I-D Needed for 7 days Submitted to IESG for Publication: Best Current	Warren Kumari Benno
draft-ietf-dnsop-isp-ip6rdns-07 **Reverse DNS in IPv6 for Internet Service Providers**	2018-09-26 14 pages	RFC Ed Queue : EDIT for 16 days Submitted to IESG for Publication: Informational Reviews: genart, opsdir, secdir	Warren Kumari Tim Wicinski
draft-ietf-dnsop-kskroll-sentinel-15 **A Root Key Trust Anchor Sentinel for DNSSEC**	2018-07-02 21 pages	IESG Evaluation::Revised I-D Needed for 21 days Submitted to IESG for Publication: Proposed Standard Reviews: genart, opsdir, secdir	Terry Manderson
draft-ietf-dnsop-terminology-bis-14 **DNS Terminology**	2018-09-13 49 pages	RFC Ed Queue : AUTH48 for 31 days Publication: Proposed Standard RFC Ed Queue : EDIT for 31 days Submitted to IESG for Publication: Best Current Practice Reviews: genart, opsdir, tsvart	Warren Kumari Tim Wicinski
draft-ietf-dnsop-refuse-any-07 **Providing Minimal-Sized Responses to DNS Q… have QTYPE=ANY**			Warren Kumari Suzanne Woolf

Goal is <14 days

… or Signposting for Operator Input

Provisioning and Multi Provider (1)

- Aliasing/redirecting in DNS
  - solution for website hosted by CDNs amongst others (www.example.com vs. example.com)
  - ANAME and recently a minimal ANAME (Evan Hunt, Peter van Dijk, and Tony Finch are in the room)
  - CNAME in apex draft and presentation by Ondřej Surý at OARC 29 (in the room; Petr Špaček started discussion in DNSOP)
    - also discusses CNAME+DNAME and SRV

Provisioning and Multi Provider (2)

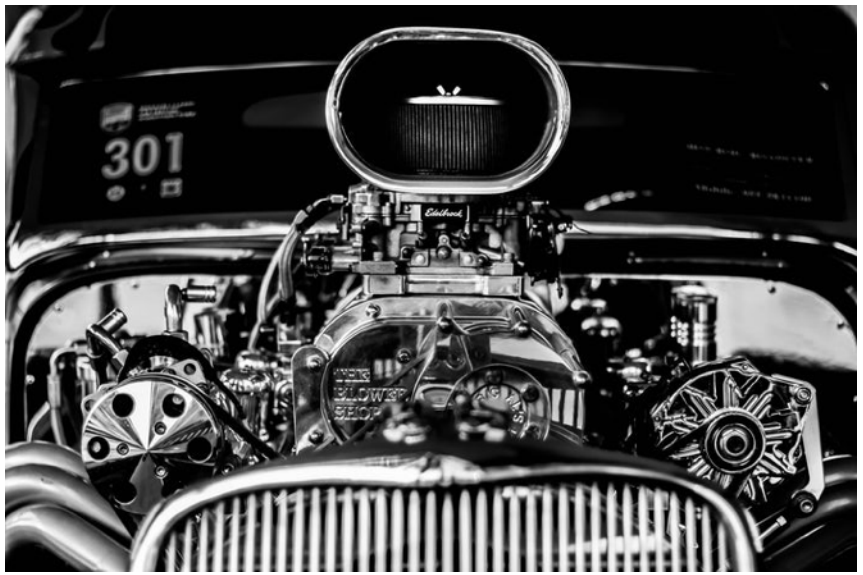
- Multi provider DNSSEC models
  - deploying DNSSEC in multiple DNS providers setup to distribute an authoritative DNS service (Shumon Huque, John Dickinson, and Jan Vcelak are in the room)
  - Two main models described: (i) serve only and (ii) sign and server

Serving Stale Data to Improve DNS Resiliency

- draft-tale-dnsop-serve-stale, authors Dave Lawrence and Warren Kumari (both in the room) and Puneet Sood
  - use stale DNS data to avoid outages when authoritative nameservers cannot be reached to refresh expired data
  - IPR statements by Akamai and Google
- Implementations exist: Akamai, Knot Resolver, OpenDNS, and Unbound

WG Last Call: Algorithm Update

- Algorithm Implementation Requirements and Usage Guidance for DNSSEC, draft-ietf-dnsop-algorithm-update (Ondřej Surý and Paul Wouters)
  - specify a set of algorithm implementation requirements and usage guidelines to ensure that there is at least one algorithm that all implementations support



The Back of the Camel and Code Complexity –a personal perspective–

- (New) IETF DNS standards add complexity
  - “We do have the sense that the discussion in London really resonated with people, and a couple of the ideas out if it seem to be continuing as part of the discussion in DNSOP — that we should think about complexity in the protocol, and pay attention to who’s implementing things and why. We know that over the long term, wrestling with these issues is part of how we keep a successful protocol evolving in a useful way.”

- DNS software implementors

NEED FOR SPEED™

- Work arounds for broken software
  - DNS flag day

DPRIVE Recharter

- Develop requirements for adding confidentiality to DNS exchanges between recursive resolvers and authoritative servers (unpublished document).
- Investigate potential solutions for adding confidentiality to DNS exchanges involving authoritative servers (Experimental).
- Define, collect and publish performance data measuring effectiveness of DPRIVE-published technologies against pervasive monitoring attacks.
- Document Best Current Practices for operating DNS Privacy services.